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Sequence Listing was accepted.

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Reviewer: markspencer

Timestamp: [year=2010; month=12; day=14; hr=13; min=33; sec=1; ms=550; ]

# Validated By CRFValidator v 1.0.3

Application No: 08793408 Version No: 2.0

Input Set:

Output Set:

**Started:** 2010-12-14 12:49:45.045

Finished: 2010-12-14 12:49:46.369

**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 324 ms

Total Warnings: 0

Total Errors: 0

No. of SeqIDs Defined: 125

Actual SeqID Count: 125

#### SEQUENCE LISTING

#### (1) GENERAL INFORMATION:

- (ii) TITLE OF INVENTION: Improvements in or Relating to Binding Proteins for Recognition of DNA
- (iii) NUMBER OF SEQUENCES: 125
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Pillsbury Madison & Sutro, L.L.P.
  - (B) STREET: 1100 New York Avenue, N.W.
  - (C) CITY: Washington
  - (D) STATE: D.C.
  - (E) COUNTRY: USA
  - (F) ZIP: 20005-3918
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Diskette
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: Word Perfect
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: 08793408
  - (B) FILING DATE: 1997-06-02
    - (C) CLASSIFICATION:
  - (vii) PRIOR APPLICATION DATA:
    - (A) APPLICATION NUMBER: US 08/793,408
    - (B) FILING DATE: 02-JUN-1997
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: PCT/GB95/01949
  - (B) FILING DATE: 17-AUG-1995
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: GB 9514698.1
  - (B) FILING DATE: 18-JUL-1995
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: GB 9422534.9
  - (B) FILING DATE: 08-NOV-1994
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: GB 9416880.4
  - (B) FILING DATE: 20-AUG-1994
- (2) INFORMATION FOR SEQ ID NO: 1:

(A) LENGTH: 60 base pairs	
(B) TYPE: nucleic acid	
(C) STRANDEDNESS: single	
(D) TOPOLOGY: linear	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:	
CTCCTGCAGT TGGACCTGTG CCATGGCCGG CTGGGCCGCA TAGAATGGAA 5	50
CAACTAAAGC	50
(2) INFORMATION FOR SEQ ID NO: 2:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 92 amino acids</li><li>(B) TYPE: amino acid</li><li>(C) STRANDEDNESS:</li><li>(D) TOPOLOGY: unknown</li></ul>	
(ii) MOLECULE TYPE: protein	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:	
Met Ala Glu Glu Arg Pro Tyr Ala Cys Pro 5 10	
Val Glu Ser Cys Asp Arg Arg Phe Ser Arg 15 20	
Ser Asp Glu Leu Thr Arg His Ile Arg Ile 25 30	
His Thr Gly Gln Lys Pro Phe Gln Cys Arg 35 40	
Ile Cys Met Arg Asn Phe Ser Xaa Xaa Xaa 45 50	
Xaa Leu Xaa Xaa His Xaa Arg Thr His Thr 55 60	
Gly Glu Lys Pro Phe Ala Cys Asp Ile Cys 65 70	
Gly Arg Lys Phe Ala Arg Ser Asp Glu Arg 75 80	
Lys Arg His Thr Lys Ile His Leu Arg Gln 85 90	
Lys Asp	
(2) INFORMATION FOR SEQ ID NO: 3:	

(i) SEQUENCE CHARACTERISTICS:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 26 base pairs

		(C) STRANDEDNESS: single (D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 3:	
TATO	GACTTO	GG ATGGGAGACC GCCTGG	26
(2)	INFO	RMATION FOR SEQ ID NO: 4:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 28 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 4:	
AATT	CCAG	GC GGTCTCCCAT CCAAGTCA	28
(2)	INFO	RMATION FOR SEQ ID NO: 5:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 21 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 5:	
TATA	ATAGCO	GT GGGCGTATAT A	21
(2)	INFO	RMATION FOR SEQ ID NO: 6:	
		SEQUENCE CHARACTERISTICS:  (A) LENGTH: 24 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear  SEQUENCE DESCRIPTION: SEQ ID NO: 6:	
caci			0.4
GCG	ratat <i>a</i>	AC GCCCACGCTA TATA	24
(2)	INFO	RMATION FOR SEQ ID NO: 7:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 21 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 7:	
TATA	ATAGCO	GN NNGCGTATAT A	21

(B) TYPE: nucleic acid

(2) INFORMATION FOR SEQ ID NO: 8:

	(i)	SEQUENCE CHARACTERISTICS:	
		(A) LENGTH: 24 base pairs	
		(B) TYPE: nucleic acid	
		(C) STRANDEDNESS: single	
		(D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 8:	
GCG'	TATAT	AC GCNNNCGCTA TATA	24
(2)	INFO	RMATION FOR SEQ ID NO: 9:	
	(i)	SEQUENCE CHARACTERISTICS:	
	, ,	(A) LENGTH: 33 base pairs	
		(B) TYPE: nucleic acid	
		(C) STRANDEDNESS: single	
		(D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 9:	
TTC	CATGG	AG ACGCAGAAGC CCTTCAGCGG CCA	33
(2)	INFO	RMATION FOR SEQ ID NO: 10:	
	(i)	SEQUENCE CHARACTERISTICS:	
		(A) LENGTH: 33 base pairs	
		(B) TYPE: nucleic acid	
		(C) STRANDEDNESS: single	
		(D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 10:	
TTC	CATGG	AG ACGCAGGTGA GTTCCTCACG CCA	33
(2)	INFO	RMATION FOR SEQ ID NO: 11:	
	(i)	SEQUENCE CHARACTERISTICS:	
		(A) LENGTH: 33 base pairs	
		(B) TYPE: nucleic acid	
		(C) STRANDEDNESS: single	
		(D) TOPOLOGY: linear	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 11:	
CCC	CTTTC'	TC TTCCAGAAGC CCTTCAGCGG CCA	33
(2)	INFO	RMATION FOR SEQ ID NO: 12:	
	/ - \	CEQUENCE CUADACTEDICTICO:	
	( 上 )	SEQUENCE CHARACTERISTICS:	
		(A) LENGTH: 33 amino acids	
		(B) TYPE: amino acid (C) STRANDEDNESS:	
		(C) STRANDEDNESS: (D) TOPOLOGY: unknown	
		(D) TOLOHOOT. GIIKIIOWII	

(ii) MOLECULE TYPE: peptide

Met	Ala Glu Glu Lys Pro Phe Gln Cys Arg 5 10
Ile	Cys Met Arg Asn Phe Ser Asp Arg Ser 15 20
Ser	Leu Thr Arg His Thr Arg His Thr Gly 25 30
Glu	Lys Pro
(2) INFO	RMATION FOR SEQ ID NO: 13:
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 33 amino acids  (B) TYPE: amino acid  (C) STRANDEDNESS:  (D) TOPOLOGY: unknown
(ii)	MOLECULE TYPE: peptide
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 13:
Met	Ala Glu Glu Lys Pro Phe Gln Cys Arg 5 10
Ile	Cys Met Arg Asn Phe Ser Glu Arg Gly 15 20
Thr	Leu Ala Arg His Glu Lys His Thr Gly 25 30
Glu	Lys Pro
(2) INFO	RMATION FOR SEQ ID NO: 14:
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 27 amino acids  (B) TYPE: amino acid  (C) STRANDEDNESS:  (D) TOPOLOGY: linear
(ii)	MOLECULE TYPE: peptide
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 14:
Phe	Gln Cys Arg Ile Cys Met Arg Asn Phe 5 10
Ser	Gln Gly Gly Asn Leu Val Arg His Leu 15 20
Arg	His Thr Gly Glu Lys Pro

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

(2) INFORMATION FOR SEQ ID NO: 15: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 26 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15: Phe Gln Cys Arg Ile Cys Met Arg Asn Phe 5 10 Ser Gln Ala Gln Thr Leu Gln Arg His Leu 15 20 Lys His Thr Gly Glu Lys 25 (2) INFORMATION FOR SEQ ID NO: 16: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 26 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16: Phe Gln Cys Arg Ile Cys Met Arg Asn Phe 5 10 Ser Gln Ala Ala Thr Leu Gln Arg His Leu 15 20 Lys His Thr Gly Glu Lys 25 (2) INFORMATION FOR SEQ ID NO: 17: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 26 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17: Phe Gln Cys Arg Ile Cys Met Arg Asn Phe 10

Gln	Ala	Gln	Asp	Leu	Gln	Arg	His	Leu
			15					20
His	Thr	Gly	Glu	Lys				
			25					
				15 His Thr Gly Glu	15 His Thr Gly Glu Lys	15 His Thr Gly Glu Lys	15 His Thr Gly Glu Lys	His Thr Gly Glu Lys

## (2) INFORMATION FOR SEQ ID NO: 18:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 89 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: unknown
- (ii) MOLECULE TYPE: protein
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

Met Ala Glu Glu Lys Pro Phe Gln Cys Arg
5

Ile Cys Met Arg Asn Phe Ser Asp Arg Ser
15 20

Ser Leu Thr Arg His Thr Arg Thr His Thr 25

Gly Glu Lys Pro Phe Gln Cys Arg Ile Cys
35

Met Arg Asn Phe Ser Asp Arg Ser His Leu
45 50

Thr Arg His Thr Arg Thr His Thr Gly Glu 55

Lys Pro Phe Gln Cys Arg Ile Cys Met Arg
65 70

Asn Phe Ser Asp Arg Ser Asn Leu Thr Arg
75

His Thr Arg Thr His Thr Gly Glu Lys 85

### (2) INFORMATION FOR SEQ ID NO: 19:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: unknown
- (ii) MOLECULE TYPE: peptide
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

Arg Ser Asp His Leu Thr Thr His	s Ile Arg 10
INFORMATION FOR SEQ ID NO: 20:	
(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 10 amino acids	5
(B) TYPE: amino acid	
(C) CTDANDCDNCCC.	

(C) STRANDEDNESS:

(2)

- (D) TOPOLOGY: unknown
- (ii) MOLECULE TYPE: peptide
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

Arg Val Asp Ala Leu Glu Ala His Arg Arg 5 10

- (2) INFORMATION FOR SEQ ID NO: 21:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 10 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: unknown
  - (ii) MOLECULE TYPE: peptide
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

Gln Arg Ala Ser Leu Ala Ser His Met Arg 5 10

- (2) INFORMATION FOR SEQ ID NO: 22:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 10 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: unknown
  - (ii) MOLECULE TYPE: peptide
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

Asn Arg Asp Thr Leu Thr Arg His Ser Lys 5 10

- (2) INFORMATION FOR SEQ ID NO: 23:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 10 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: unknown
  - (ii) MOLECULE TYPE: peptide

	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 23:
	Gln	Lys Gly His Leu Thr Glu His Arg Lys
		5 10
2)	INFO	RMATION FOR SEQ ID NO: 24:
	(i)	SEQUENCE CHARACTERISTICS:
		(A) LENGTH: 10 amino acids
		(B) TYPE: amino acid
		(C) STRANDEDNESS:
		(D) TOPOLOGY: unknown
	(ii)	MOLECULE TYPE: peptide
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 24:
	Gln	Ser Val His Leu Gln Ser His Ser Arg
		5 10
2)	INFO	RMATION FOR SEQ ID NO: 25:
	(i)	SEQUENCE CHARACTERISTICS:
		(A) LENGTH: 10 amino acids
		(B) TYPE: amino acid
		(C) STRANDEDNESS:
		(D) TOPOLOGY: unknown
	(ii)	MOLECULE TYPE: peptide
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 25:
	Arg	Leu Asp Gly Leu Arg Thr His Leu Lys 5 10
2)	INFO	RMATION FOR SEQ ID NO: 26:
	(i)	SEQUENCE CHARACTERISTICS:
		(A) LENGTH: 10 amino acids
		(B) TYPE: amino acid
		(C) STRANDEDNESS:
		(D) TOPOLOGY: unknown
	(ii)	MOLECULE TYPE: peptide
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 26:
	Thr	Pro Gly Asn Leu Thr Arg His Gly Arg
		5 10
2)	INFO	RMATION FOR SEQ ID NO: 27:
	(i)	SEQUENCE CHARACTERISTICS:
	. ,	(A) LENGTH: 10 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS:

(ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 27: Asn Gly Gly Asn Leu Gly Arg His Met Lys 5 10 (2) INFORMATION FOR SEQ ID NO: 28: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 28: Arg Ala Asp Ala Leu Met Val His Lys Arg 5 10 (2) INFORMATION FOR SEQ ID NO: 29: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 29: Asn Gln Ser Asn Leu Glu Arg His His Arg 5 10 (2) INFORMATION FOR SEQ ID NO: 30: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 30: Asp Arg Ser Asn Leu Glu Arg His Thr Arg 5 10 (2) INFORMATION FOR SEQ ID NO: 31:

(i) SEQUENCE CHARACTERISTICS:

(D) TOPOLOGY: unknown

- (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31: Arg Ser Asp Thr Leu Lys Lys His Gly Lys 5 10 (2) INFORMATION FOR SEQ ID NO: 32: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32: Gln Gln Ser Asn Leu Val Arg His Gln Arg 5 10 (2) INFORMATION FOR SEQ ID NO: 33: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 33: Asn Gly Ala Asn Leu Glu Arg His Arg Arg 10 (2) INFORMATION FOR SEQ ID NO: 34: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide
  - Arg Glu Asp Ala Leu Thr Ser His Glu Arg 10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

(2) INFORMATION FOR SEQ ID NO: 35: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35: Arg Gly Asp His Leu Lys Asp His Ile Lys 5 10 (2) INFORMATION FOR SEQ ID NO: 36: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 36: Arg Gly Pro Asp Leu Ala Arg His Gly Arg 5 10 (2) INFORMATION FOR SEQ ID NO: 37: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 37: Arg Glu Asp Val Leu Ile Arg His Gly Lys 5 10 (2) INFORMATION FOR SEQ ID NO: 38: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38: Arg Ser Asp Leu Leu Gln Arg His His Lys
5 10

- (2) INFORMATION FOR SEQ ID NO: 39:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 10 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: unknown
  - (ii) MOLECULE TYPE: peptide
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 39:

Arg Gln Asp Thr Leu Val Gly His Glu Arg 5

- (2) INFORMATION FOR SEQ ID NO: 40:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 10 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: unknown
  - (ii) MOLECULE TYPE: peptide